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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/622,279	07/18/2003	Kevan Lee Miller	YOR999124US2	4589
23405	7590	04/19/2005	EXAMINER HARPER, KEVIN C	
HESLIN ROTHENBERG FARLEY & MESITI PC 5 COLUMBIA CIRCLE ALBANY, NY 12203			ART UNIT 2666	PAPER NUMBER

DATE MAILED: 04/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/622,279

Applicant(s)

MILLER ET AL

Examiner

Kevin C. Harper

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 July 2003.  
2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-14, 17-30 and 33-40 is/are rejected.  
7) ☒ Claim(s) 15, 16, 31 and 32 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 7/18/03 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 7/03.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-3, 5-10, 17-19, 21-26 and 33-40 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 2, 20 and 37-38 of copending Application No. 09/282,101 in view of Gai et al. (US 6,535,491).

1. Regarding claims 1-3, 5-10, 17-19, 21-26 and 33-40, claim 2 of the '101 application recites a method, claims 20 and 37 recite a system, and claim 38 recites an article of manufacture, for reconfiguring the network while preserving the first-in first out delivery order quality to clients within the reconfigured network. However, the claims additionally recite quiescing the network to preserve the delivery order. In removing network quiescing, the scope of the claims is merely broadened by eliminating elements and their functions. It has been held that omission of an element and its function is an obvious expedient if the remaining elements perform the same function as before. *In re Karlson*, 136 USPQ 184 (CCPA). Also note *Ex parte Rainu*, 168 USPQ 365 (Bd. App. 1969) (omission of a reference element whose function is not needed would be obvious to one skilled in the art). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to not recite preserving message deliver order by quiescing the network in the '101 application.

2. Further, claims 2, 20 and 37-38 of the '101 application do not recite messages not being lost during reconfiguration. Gai discloses initiating a reconfiguration of a network (col. 11, lines 31-36; fig. 1) and reconfiguring the network (col. 12, lines 27-37; fig. 2, items 240), where messages are not lost during reconfiguration (col. 15, lines 13-16). The reconfiguration is not disruptive (col. 15, lines 1-2) and changes a first routing path between nodes to a second routing path between the nodes (col. 7, lines 49-53). The initiation of the reconfiguration comprises forwarding a request from a configuration manager or node to the other nodes of the network (col. 12, lines 57-61; col. 13, lines 33-44). The reconfiguration is performed by a computer program on a computer readable medium (col. 8, lines 35-47). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to recite reconfiguring the publish/subscribe system without message loss in the '101 application in order to seamlessly provide connectivity after a network failure.

This is a provisional obviousness-type double patenting rejection.

Claims 4 and 20 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 2, 20 and 37-38 of copending Application No. 09/282,101 in view of Gai et al. (US 6,535,491) as applied to claim 3 or 19 above, and further in view of Takano et al. (US 5,600,630).

3. Regarding claims 4 and 20, claims 2, 20 and 37-38 of the '101 application in view of Gai do not recite or make obvious changing from a first path in a first routing table to a second path in a second routing table in response to a fault. Takano discloses changing from a first path in a first routing table to a second path in a second routing table (fig. 1; col. 7, lines 37-47 and line 59 through col. 8, line 5). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to recite changing from a first path in a first routing table to a second path

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to a second routing table in the '101 application in order to decrease the time for fault recovery (Takano, col. 2, lines 13-17).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-3, 6-10, 17-19, 22-26, 33-37 and 39-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bracho et al. (US 5,870,605) in view of Gai et al. (US 6,535,491).

1. Regarding claims 1-3, 6-10, 17-19, 22-26, 33-37 and 39-40, Bracho discloses a publish/subscribe system (fig. 1). However, Bracho does not disclose reconfiguring the system. Gai discloses initiating a reconfiguration of a network (col. 11, lines 31-36; fig. 1) and reconfiguring the network (col. 12, lines 27-37; fig. 2, items 240), where messages are not lost during reconfiguration (col. 15, lines 13-16). The reconfiguration is not disruptive (col. 15, lines 1-

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2) and changes a first routing path between nodes to a second routing path between the nodes (col. 7, lines 49-53). The initiation of the reconfiguration comprises forwarding a request from a configuration manager or node to the other nodes of the network (col. 12, lines 57-61; col. 13, lines 33-44). The reconfiguration is performed by a computer program on a computer readable medium (col. 8, lines 35-47). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to reconfigure the publish/subscribe system of Bracho without message loss in order to seamlessly provide connectivity after a network failure.

Claims 4 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bracho in view of Gai as applied to claim 3 or 19 above, and further in view of Takano et al. (US 5,600,630).

2. Regarding claims 4 and 20, Bracho in view of Gai does not disclose a changing from a first path in a first routing table to a second path in a second routing table in response to a fault. Takano discloses changing from a first path in a first routing table to a second path in a second routing table (fig. 1; col. 7, lines 37-47 and line 59 through col. 8, line 5). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to change from a first path in a first routing table to a second path to a second routing table in the invention of Bracho in view of Gai as evidenced by Takano in order to decrease the time for fault recovery (Takano, col. 2, lines 13-17).

Claim 5, 11-14, 21, 27-30 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bracho in view of Gai. as applied to claims 1, 8, 17, 24 or 36 above, and further in view of Moskowitz (US 5,428,606) and Shaffer et al. (US 6,236,642).

3. Regarding claim 5, 21 and 38, Bracho in view of Gai does not disclose an ordering requirement for delivery of messages nor preserving a message order during reconfiguring of the publish/subscribe system. Moskowitz discloses a publish/subscribe system (fig. 1) having an ordering requirement (col. 3, lines 8-10 and 41-44 and 50-52). Therefore, it would have been

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obvious to one skilled in the art at the time the invention was made to provide ordered data transmissions in the invention of Bracho in view of Gai as evidenced by Moskowitz in order to allow for real-time data transmissions (Moskowitz, col.1, lines 50-60).

4. Further, Bracho in view of Gai and Moskowitz does not disclose preserving message order during system reconfiguration. Shaffer discloses preserving message order during a system reconfiguration (fig. 1, item 108; fig. 5; col. 2, lines 47-51). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to preserve message order during the system reconfiguration in the invention of Bracho in view of Gai and Moskowitz as evidenced by Shaffer in order to avoid the reception of out-of-sequence real-time data (Moskowitz, col. 2, lines 28-34).

5. Regarding claims 11-14 and 27-30, Bracho in view of Gai does not disclose an ordering requirement for delivery of messages nor preserving a message order during reconfiguring of the publish/subscribe system. Moskowitz discloses a publish/subscribe system (fig. 1) having an ordering requirement (col. 3, lines 8-10 and 41-44 and 50-52). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to provide ordered data transmissions in the invention of Bracho in view of Gai as evidenced by Moskowitz in order to allow for real-time data transmissions (Moskowitz, col.1, lines 50-60).

6. Further, Bracho in view of Gai does not disclose refraining from delivering a CS-message or SC-message to a node via a new routing path until other messages are delivered to the node from an old routing path (note: a CS-message is a message received at a hub from a publishing broker and a SC-message is a message delivered from a hub to a subscriber - Bracho, col. 5, lines 25-47).

Shaffer discloses preserving message order during a system reconfiguration (fig. 1, item 108; fig. 5; col. 2, lines 47-51) by queuing and delaying the reception of packets via a new routing path until

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packets from an old routing path are received (col. 5, lines 47-55), until a predefined time period expires. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to preserve message order during the system reconfiguration in the invention of Bracho in view of Gai and Moskowitz as evidenced by Shaffer in order to avoid the reception of out-of-sequence real-time data.

### ***Allowable Subject Matter***

7. Claims 15-16 and 31-32 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Harper whose telephone number is 571-272-3166. The examiner can normally be reached weekdays from 11:30 AM to 7:00 PM ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema S. Rao, can be reached at 571-272-3174. The centralized fax number for the Patent Office is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications associated with a customer number is available through Private PAIR only. For more information about the PAIR system, see [portal.uspto.gov](http://portal.uspto.gov). Should you have questions on access to

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the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Kevin C. Harper

April 14, 2005

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